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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/057,196	01/24/2002	Stefan-Cristian Rezeanu	CYP-0103	1729

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EXAMINER

COX, CASSANDRA F

ART UNIT	PAPER NUMBER
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2816

DATE MAILED: 05/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/057,196	Applicant(s) REZEANU, STEFAN-CRISTIAN	
	Examiner Cassandra Cox	Art Unit 2816	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 February 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 16-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 9-11 is/are rejected.
- 7) ☒ Claim(s) 5-8 and 12-15 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>1/24/02</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of group I, claims 1-15 in the reply filed on 02/28/05 is acknowledged. The traversal is on the ground(s) that both sets of claims are directed to clocking systems for memories. This is not found persuasive because the claims of group I refer to a clocking system that is used in a memory circuit, while the claims of group II refer to the memory system itself.

The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-4 and 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chang et al. (U.S. Patent No. 6,452,433).

In reference to claim 1 Chang discloses in Figure 6 a clocking system comprising: an external clock (603); a first delay block (604) having an input coupled to the external clock (603) and an output coupled to a master (608) of an output register; and a slave (610) of the output register coupled to the external clock (603 through delay element 606). Chang does not disclose a clock shaper having an input coupled to the external clock and an access clock at an output. Using flip-flops (which receive an external clock and wherein that clock may be used to clock other circuits in a system) is

well-known. It would have been obvious to one skilled in the art at the time of the invention that this clocking system (flip-flop 600 of Chang) could be used in a number of circuits including a memory circuit in which the external clock (603) is provided to another circuit (which would be equivalent to the clock shaper) that outputs an access *clock* (which can be any type of clock) for the advantage of being able to synchronize operations of multiple circuits within a system.

In reference to claim 2, Chang discloses in Figure 6 a second delay block (606) having an input coupled to the external clock (603) and an output coupled to the slave (610) of the output register. The same applies to claims 9-11 (wherein the determining the desired delay is seen to be performed when the second delay block (606) is chosen).

In reference to claim 3, Chang discloses in Figure 6 and 8 that the first delay by the first delay block (604) is not equal to a second delay by a second delay block (606).

In reference to claim 4, Chang discloses all the limitations of the base claim as mentioned above with respect to claims 1-3. Chang does not disclose that the first delay is greater than the second delay. This is seen to be a design expedient dependent on the environment and the desired outcome. It's obvious that you wouldn't want the master and slave latches to latch the input signal simultaneously, so you would set the delay times of the first and second delay dependent upon which latch you want to operate first.

Allowable Subject Matter

4. Claims 5-8 and 12-15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

5. The following is a statement of reasons for the indication of allowable subject matter: Claim 5 would be allowable because the closest prior art of record fails to disclose a circuit as shown in Figure 2 wherein the system further includes a logic inversion stage (104) in combination with the rest of the limitations of the base claims and any intervening claims. Claim 6 would be allowable because the closest prior art of record fails to disclose a circuit as shown in Figure 2 wherein the clock shaper is a programmable clock duty cycle control block (46) in combination with the rest of the limitations of the base claims and any intervening claims. Claim 7 would be allowable because the closest prior art of record fails to disclose a circuit as shown in Figure 2 wherein the first delay block (100) has a programmable delay in combination with the rest of the limitations of the base claims and any intervening claims. Claim 8 would be allowable because the closest prior art of record fails to disclose a circuit as shown in Figure 2 wherein the second delay block (110) has a programmable delay in combination with the rest of the limitations of the base claims and any intervening claims. Claims 12-15 would be allowable because the closest prior art of record fails to disclose a circuit as shown in Figure 2 wherein the method further includes the steps of determining if a minimum clock-to-data time is desired and if so, setting a slave delay

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(110) to a minimum in combination with the rest of the limitations of the base claims and any intervening claims.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cassandra Cox whose telephone number is 571-272-1741. The examiner can normally be reached on Monday-Thursday from 7:00 AM to 4:30 PM and on alternate Fridays from 7:30 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Callahan can be reached on 571-272-1740. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CC
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May 14, 2005



TUAN T. LAM
PRIMARY EXAMINER